

## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.





*Hyde's*

# BERRY BOOK

FOR  
CALIFORNIA  
GROWERS

*H. A. Hyde Co*  
**GROWERS-NURSERMEN**  
WATSONVILLE, CALIFORNIA



## *It is surprising to note—*

*that in California thousands of rural homes and ranches buy almost all of their small fruits and berries on the market.*

*Not only is this more expensive, but many people never have the opportunity of enjoying the wonderful flavor of berries fresh from the vines.*

*We have in mind one farmer in the Watsonville district who would not eat a blackberry after it had been picked for one hour.*

*Imagine the pleasure of picking a few luscious berries in the cool of the morning for the breakfast dish. With a little effort and planning every person who has a small backyard can easily grow a succession of berries from spring until late fall. The list of varieties include the following:*

HYDE'S BANNER STRAWBERRY  
CUTHBERT RASPBERRY  
RANAREE RASPBERRY  
MAMMOTH BLACKBERRY  
HIMALAYA BLACKBERRY  
MACATAWA BLACKBERRY

CORY THORNLESS BLACKBERRY  
OREGON EVERGREEN BLACKBERRY  
LOGANBERRY  
PHENOMENAL BERRY  
CHERRY CURRANT  
OREGON CHAMPION GOOSEBERRY



In the selection of your plantings for home use we offer you the advantage of the same service and organization that supplies the big commercial growers with the true clean stock so necessary to their success.



# *H. A. Hyde Co.*

GROWERS-NURSEYMEN

WATSONVILLE, CALIFORNIA



## FOREWORD

**STRAWBERRIES** are one of the most important commercial crops of central California and "old timers" will recall the industry had reached carload production in our valley forty years ago. Since those early days varieties and methods have changed. The "Berry Train" has given way to fast trucks. Handling has been standardized, distribution has become national and new methods have expanded and developed berry growing into one of the big and highly specialized industries of California.

It has been the good fortune of the Hyde Company to have been associated with the pioneering and the development of this great industry down to the present day.

Our Mr. H. A. Hyde having the vision to foresee the future possibilities and requirements, began in a modest way some twenty years ago to work out the problems of planting stock, varieties and methods of production.

This work has been carried forward consistently and constructively—with an ever increasing demand for Hyde Plants, the support and confidence of growers making possible the development of our extensive plant growing organization operating in many sections, wherever condition of climate and soil gave promise of better planting stock—always under our personal supervision and always reselecting and building up planting stocks that could be depended upon for trueness to type, fruiting qualities and longevity. Always on new ground each year and from one-year mother plants.

That our efforts have not only literally borne fruit—but have made many berries "grow where only one grew before"—is a matter of commercial record for many of the largest most successful plantings in California are set with Hyde Plants and the world's record yield has been secured therefrom.

In our efforts to produce disease-free, dependable stock we have been constantly aided and encouraged by the representatives of the U. S. Department of Agriculture and the state agricultural colleges of California, Oregon and Washington. The value of their work to commercial growers is seldom understood and their greatest reward is their satisfaction of accomplishment and service to humanity. Their service and findings have made possible some of our greatest industries and have saved others from loss and ruin.

When a newer or better way to produce plants or fruit is found we want to be the first to adopt it and pass it along to our friends, our customers, whose confidence has been our inspiration in the long hard struggle to produce and maintain the highest grades of commercial planting stock.

To help the beginner and to make available for the reference of growers the information gathered by his observations and experience, Mr. Hyde has compiled this Berry Book and if you do not find the answer to your problems herein, write or call and he will personally advise you.

**H. A. HYDE COMPANY**

---

### GUARANTEE OF GENUINENESS

*While we exercise the greatest care to have all our stocks true to label, and hold ourselves in readiness on proper proof to replace all trees, seeds, etc., that may prove untrue to label, free of charge, or refund the amount paid, it is mutually understood and agreed to between the purchaser and ourselves that our guarantee of genuineness shall in no case make us liable for any sum greater than that originally received for said trees, seeds, etc., that may prove untrue.*

H. A. HYDE COMPANY

# STRAWBERRY PLANTS

## Why your financial success depends upon the quality of your Planting Stock

The commercial production of strawberries in central California has become such a highly specialized and intensive culture that no other place in the world equals the production per acre and in no other place do plants bear through such long seasons and continue in bearing for so many years. Therefore plants to prove profitable must have unusual vigor and vitality to bear heavy crops through a long season and continue consistently during the life of the planting, 3 to 6 years.

If they do not bear uniformly and heavily or if they run out and do not continue to bear profitably the original investment may be lost, and plants are only a small part of the cost. The lease, the water, the labor—all depend upon the fruiting quality.

These heavy yields are not entirely due to the climate and soils but are the result of highly developed cultural methods, very profitable if properly executed, and good plants of the variety best suited to the demand or condition are used, hence we repeat it is important that the stock be right.

### Plants grown in cool climate best

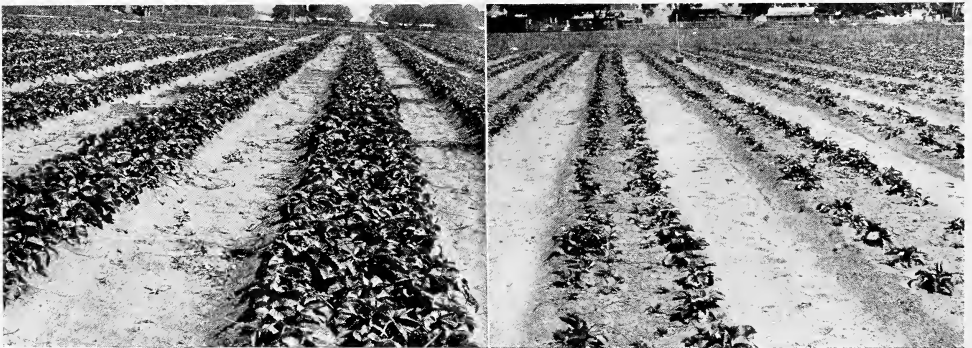
In the earlier days of the industry, plants were taken from the one-year plants in the local commercial beds and these would give fair returns 5 to 8 tons per acre. Costs of growing were very much less in those days.

Since then experiments in methods of propagation and introduction of stocks from various sections demonstrated that plants produced in colder climates having a decided dormant season outyielded the plants grown in the warmer irrigated sections, yields running up to 12 and 15 tons per acre and in exceptional cases up to 17 tons.

The experienced grower and heavy investor realizes that with the high cost of labor, rental, water, etc., he must have the most dependable planting stock which is but a small part of his investment. But the beginner or stranger without this knowledge often makes the mistake of using plants from warm sections or that have been offered by equally inexperienced or misinformed dealers (who ship thousands of plants in from promiscuous sources) and suffers serious loss or even total failure.

For nearly 20 years we have systematically produced our plants from selected, virile, one-year mother plants set in new ground each season under ideal conditions in a cool climate without irrigation—and are the only firm in the west with facilities for producing and delivering large blocks of plants up to millions of the same variety and quality. This is a big advantage to commercial growers who can depend upon receiving from us the identical strains and uniform grades year after year.

Our built-up Hyde strains have been unexcelled for quality, productiveness and long life. For proof of this we refer you to the many large successful commercial plantings we have supplied in the big producing section of central California.



A striking example of the difference in vigor and development between plants of a selected strain grown in a cold section without irrigation and identical stock of the same that remained in California and were grown in a warm section. The plants from the North and those produced in the South were set and grown under the same conditions at the same time. Northern grown plants on left. Variety Molinda—Oak Grove, 1920

# STRAWBERRY VARIETIES

The varieties usually planted are the Banner, Nick Ohmer, New Oregon, Marshall, Magoon and Klondike. The genuine Banner is a California production. It excels in every desirable quality all other varieties, and from the date of its introduction in 1899 received instant recognition from commercial growers wherever distributed, maintaining its position as the most profitable and satisfactory market variety to date.

**HYDE'S Selected BANNER**—The great beauty, delicious flavor and sweetness, rich dark glossy red color, uniform size, firmness and keeping qualities, have made the Banner in big demand in every market at top prices. The planting stock was carefully controlled for many years and not until 1916 was any of the true stock offered for sale, but the demand was so insistent that many substitutes have been sold for "BANNER." The true stock is still scarce and planters should protect themselves by purchasing from reliable authorized distributors only. The growth is vigorous and upright, the strong erect plant bearing very early and abundantly, its vigor and hardiness making it practically immune to disease and pests.

**Hyde's Nick Ohmer**—This is one of the few eastern introductions which have made good under our California conditions. On account of its early bearing, heavy yields, and the splendid keeping qualities of this bright glossy fruit, it has proved generally popular for shipping.

Our strain of Nick Ohmer was re-selected and carefully grown and is the right one for California commercial growers. There are other varieties sold as Nick Ohmer that are not suited to our conditions or trade.

**New Oregon**—One of the most satisfactory and profitable varieties for California commercial plantings. It is large, firm and of fine color and a brilliant deep bright red having a glossy varnished appearance when fully ripe. This dark blood red coloring extends through to the very center and no matter how large, the New Oregon is never hollow. When fully ripe the distinctive flavor is suggestive of the wild berry, is crisp and delicious and will remain on the vine for three days without injury, keeping perfectly for many days after picking, stands handling and long shipments and will hold its color, shape and flavor when canned.

**Hyde's Marshall**—Is a firm red berry, a good keeper and one of the most dependable standard market sorts. In this County it has proved especially useful on heavy adobe soils, where it is a heavy cropper.

**Magoon**—The best variety for small plantings and home gardens. It is a very heavy yielder and thrives well on almost any soil. It is not as good a keeper as the commercial varieties, but a favorite because of its heavy yields.

**Klondike**—An early variety, thriving in warm dry sections and where seasons are short. The large deep red berries are of the finest quality, good shippers and keepers. There is a great difference in the bearing quality and vigor of the stocks offered and growers should be sure to purchase from reliable producers.

**Progressive**—Everbearing—Considered the best of the so-called Everbearing class—Bears heavily and continuously, the large rich red berries are of the finest quality. Requires intensive culture and the berries must be picked as fast as ripened—if plants are neglected the berries deteriorate. A good home garden sort.

## PLANT IMPROVEMENT

*Referring to this Molinda planting, on a trip to Oak Grove berry farm by Dr. C. W. Whitten, at that time head of the pomology department of our state university, Dr. Horn and others connected with the state university, Dr. Whitten stated that he had never seen a finer example of the value of plant selection than this Molinda bed and that never in his experience in America had he seen such large numbers of plants set in single variety beds as true to type, form and grade as these large areas of the different varieties, covering over 100 acres in full bearing.*

*Molinda was originated at Watsonville in the early days by James Watson and by constant replanting of local stock was weakened and deteriorated.*

## When to Plant

Where conditions are right in California, good drainage, light or sandy soil, or ground that does not become water logged, we advise planting during December or January. At this time the plants are entirely dormant in the North. They have been checked by the severe fall frosts, sap flow stopped and are in perfect condition to be transplanted. They can be taken up at this stage and this time of year, packed, shipped and re-set with the minimum danger of loss. Of course, if the setting of these plants should be followed by weeks of cold, wet, rainy weather whereby the ground becomes soggy and no growing condition is encountered, there might be slight loss from rotting in the ground.

It is true that in many of the adobe and heavier soils a good stand of plants has been obtained by late setting. On the other hand, everything is against this practice. There has usually been by this time some growing weather encountered in the colder sections where the plants are being grown. The sap has started to flow and root growth been encouraged. If the plants are taken up, packed and shipped under these conditions the grower is working against nature. There is a liability of being a check in the plant and some loss of vitality. But if conditions are perfect in California and the plants can be immediately taken out of the boxes and set in the ground, they will start off in good shape as the days are longer and warmer, and growing conditions are better. Spring rains are frequent and the atmosphere better to promote vigorous growth. However, when everything is said and looked at from all angles it is more hazardous to set plants late from the standpoint of expecting a perfect stand than it is when they can be put out at the period of dormancy.

### EARLY SETTINGS BEST

Another feature, plants set in December do not usually make as many runners as those set in the spring. They have obtained good root growth by spring and it is not harmful at all to allow these plants to set a fair crop of fruit the first year. This brings ready money to the planter when he is starting in and needs it. If plants are set in the spring they go chiefly to runners which saps the vitality of the mother to a certain extent and no fruit should be allowed the first year.

## Preparation of Strawberry Beds and Fields

**For the Home Garden**—Where a few berries are wanted for household use, special care can be taken in the preparation of the bed. The area is small and the cost of making a perfect seed bed slight. Preferably a garden loam should be chosen for the strawberry bed, well drained of a porous nature and still not too light. If the top soil is underlaid with clay or an impervious strata it helps hold the moisture better through the summer months. If this is the case, round up the beds slightly so that the soil will not become saturated or sour.

Irrigation should always be provided at the roots and not overhead. Overhead sprinkling keeps the foliage too soft, may wash the pollen from the blossoms and damages the fruit by an excess of moisture. The simplest method is to use the double matted row system as is employed in commercial plantings, the only difference being that the rows in a garden patch are usually shorter and waterways narrower.

A maximum of fruit is desired and the plants can be set closer together, the fruit allowed to come as soon as the plants begin to grow and all runners kept trimmed off continuously. We advocate the setting of home patches in December with the best strains of varieties and thrifty plants. This early setting will bring quite a crop of berries the first spring and summer.

To encourage continuous and heavy bearing, the plants may be fertilized 2 or 3 times through each bearing season. Do not allow the patch to become too dry at any time. For home patches make your ridges 14 or 16 inches wide and the waterways 3 or 4 inches deep and 12 inches wide. Set your mother plants 4 inches back from the edge and 12 inches apart lengthwise with the row. For subsequent care of the plants, see directions for commercial fields.

**Planting for Market**—With the planting of strawberries commercially, there is so much involved in the success or failure of the project that the planter should move carefully and consider every angle of his problem. The selection of soil is a prime essential.

It is often considered that a silty light soil or one full of sand and gravel would be especially adapted. This depends a great deal on what the strata of subsoil consists of. If of clay, it often holds the moisture above and the sediment or light soil saturates as a sponge, keeping the roots of the plants too moist and rendering them a quick subject for root diseases. The best soil for strawberries is a dark medium texture loam, friable, porous and well drained. If on a slope the pitch is toward the east, south and west so much the better, as the fruit ripens quicker and the season is usually earlier. It is not necessary to have the plantation set on level land. Sidehill slopes are often used where not too steep, the run of the beds made to conform to the contour.



**Grading**—There are several problems in grading. On level fields it is best to plan for 12 to 14 ft. roads running parallel 300 ft. apart. The beds run one-half the distance through from one road to the other. We aim to give in ordinary soils about 1 inch to the 100 ft. pitch in the waterways, angles being struck from the road edge of the bed that will produce a line not over 190 ft. and graded so that not over 3 in. of soil shall be removed or changed. If the scraping is deep or too much dead soil brought to the surface, poor fruiting and unhealthy growth of vine results. If for any reason it is absolutely necessary to remove more top soil or bring dead soil up to provide the grade, be sure that ample fertilizer of bonemeal, fishmeal, sheep or stable manure be incorporated in the soil to get maximum results from the plants the first year. In commercial planting the acreage expense is so high that it does not pay to have any border plants or those which are weak and will not set fruit properly. Any ordinary surveyor can set the stakes for grading, but there are a few men in central California that have become expert with this work. We can refer you to them. Different types of scrapers are used but the Fresno is preferred.

**Plow Deep**—After the land is properly graded, it should be plowed fairly deep—from 6 to 8 inches or at least sufficiently to break up any hard-pan which might have been in the field. If a sidehill or two-way plow is used for this operation it tends to hold the grade without being disturbed. It is then left rough until planting time.

**Flumes**—Flumes are laid from the wells through the fields. Main flumes should be 10 x 10 inches or 12 x 12 inches. For the field flumes 8 x 8 inches is ample with a  $3\frac{1}{4}$  inch or  $3\frac{1}{2}$  inch hole bored at the end of each waterway.

**The Terrace Bed**—The terraces should be 28 inches wide and the waterways 24 to 28 inches. These for coast climate where soil dries out slowly.

For interior valleys or warm sections, it is best not to have the terraces over 18 inches wide and waterways may be as narrow as is proper for the work of picking.

**Setting the Plants**—Almost the first operation of a strawberry plant when growing is to lengthen the neck or crown. If a new plant is set in the bed with the leaves flush with the top of the terrace it will pull up within a few weeks leaving a hard leathery trunk or crown 1 or 2 inches long. This dries and hardens in the sun and wind and invites the attack of crown miners, borers, sunburn, etc. For that reason, in making the terraces experienced growers usually cut the edges down 1 or 2 inches lower than the top of the bed, planting at this point, setting the plants 4 inches back from the edge of the waterway and from 12 to 18 inches apart in the rows. When the first hoeing occurs several weeks after planting, the terraces are leveled out with a sharp clean cut edge, being held in that shape during the operation of the field.



Diagram showing terrace and method of planting. The dotted line indicates the soil level after plants are established.

This method requires twelve thousand plants to an acre, add planting costs.

Preparing the land, up to grading, about.....	\$10.00 per acre
Grading.....	20.00 to \$40.00
Planting.....	60.00 to 80.00

About two hundred linear feet of flume are required per acre, cost \$25.00 laid.

Strawberry plantings last from three to six years according to soil and variety, the BANNER lasting longest. When plants are set early in December, a heavy crop is produced the first year, often as high as a thousand pounds per acre. After the first year, the production runs from seven to eighteen tons, eighteen tons being the heaviest yield of which we have record—from Hyde's Improved Banner.

**Filling in with Runner Plants**—As soon as the runners begin to come it is customary to leave 3 of the strongest plants from each mother, setting these into the terrace. After the roots start well the runners can be cut from the mother, allowing the young plant to take care of itself. In this way the matted row system is built up.

After the runner plants have become established, keep all runners from the plants. By the above method quite a crop can be obtained the first season.

**Irrigating**—When irrigating, the ditches should be filled flush with the top. This allows the water to sub-irrigate the full width of the bed. As soon as the ground is dry enough to work, and before it crusts, a small sled or plank with harrow teeth set in, or a cultivator, should be run with a single horse the length of the ditch, breaking up the crust and providing aeration of the soil. The ground on the top of the terrace between the plants should be well hoed several times during the winter and spring.

**Fertilizing**—In any ordinary soils it is hardly necessary to fertilize the first year. A slight fertilization the fall and winter of the second season is very beneficial. Sheep guano, fishmeal or a commercial fertilizer of the proper balance can be sown on the terrace between the plants during the dormant season and just after the crown leaves are cut off. This should be hoed under lightly. The winter rains leach the fertilizer into the soil and it is readily assimilated by the roots when they begin to grow in the spring.

Once or twice during the summer season fertilizer can be strewn along the sides of the water ditches just before an irrigation. This should be done when the crop is in blossom, thus helping the fruit development. Just after the cultivation of the water ditch this fertilizer can be hoed in along the sides.

**Picking and Handling**—On a large plantation it is not always possible to pick berries at any particular time. Bear in mind, however, that fruit picked in the early morning will stand up longer, bring better prices and hold customers longer than when it is picked and handled during the heat of the day. Always be sure that a small shelter is provided for fruit so that it can be kept cool as soon as the crate is packed. Shade and ventilation are essential.

### TAKE NO CHANCES

*Many plants sold in the trade are assembled from different small lots grown under varying conditions and often from fruiting beds, also some plants are grown in warm sections and under conditions of forced growth—manure and irrigation—seriously affecting the vigor and longevity of the stock.*

*The best plants are those grown under natural conditions in a cool climate having a dormant season and should be grown from one year mother plants that have not fruited. Such plants have the vigor and vitality to succeed even in adverse years where weaker stock would fail.*

*Hyde's Strawberry Plants are all grown and packed under most careful supervision, according to approved standards of production especially for California planters, are low in price and are backed by our years of service to some of the largest strawberry growers in California.*



*A well kept planting*



*An attractive new basket or crate helps to bring a better price, identifies and makes a better demand for your pack and adds to your profits. See Page 17.*

# Treatment of Strawberries with Volck

By W. H. VOLCK  
DIRECTOR OF RESEARCH  
CALIFORNIA SPRAY CHEMICAL CO.  
Watsonville, Calif.



Red Spider, Aphis, and Thrips are the principal pests of strawberries. These are successfully controlled with Volck. Volck Concentrate at one per cent dilution is thoroughly effective in the majority of cases, but with very bad infestation of Red Spider one and one-half per cent may be advisable.

In spraying strawberries the concentration of material is far less important than the application. Success depends entirely on wetting the under surfaces of the leaves. It does no good to spray down on the plants.

The best way to wet strawberry plants is to use an angle nozzle throwing a conical mist spray. The nozzle should be mounted on a short rod (about one foot long). The operator should hold this rod in one hand and turn the leaves of the plant over with the other hand. Spraying at it from four directions so as to insure the complete wetting of every leaf. In other words the nozzle man must spray directly into his hand. He should not hurry, the ground will be soaking wet under every plant with a good job of spraying.

Inspect the job frequently to see that the wetting is thorough. Also inspect the work the following day. If the natural white bloom of the under sides of the leaves has been removed the job can be considered good, but if many leaves still show the natural bloom intact it is a poor job. Bad infestations of spider had best be treated again in a week to ten days. No injury will be done to the plant or berries but picking is advisable before spraying on account of getting berries dirty.

**Do not use any form of sulphur** with Volck, and plants which have been recently sulphured should not be sprayed with Volck.

**Thrips in the Bloom**—In some cases thrips cause considerable injury to the blooms and may prevent a set of berries. Ortho Nicotine Dust (10%) applied thoroughly so that there is a visible quantity of dust actually lodged in the bloom will control this pest. The thrips may appear to be killed in blooms which show no visible deposits of dusts, but in some cases revival usually takes place in a few hours.

Apply the dust during a morning which is neither wet or windy. Hand duster which can be directed at the work in much the same way as a spray nozzle gives good results.

## Spray Program for Strawberries and Bush Berries

Strawberries and Bush Berries are not troubled by a great number of pests; and a rather simple spray program will serve as control. The relative high cash investment in these crops per acre demands careful protection; and adequate spray equipment is just as much a necessary tool as a cultivator or pruning shears.

By most commercial growers, spraying is considered as "the ounce of prevention" instead of "the pound of cure" and from this viewpoint it is an excellent crop insurance.

**For Strawberries** the spray program consists of one winter spray and one or more foliage sprays.

**Winter Spray**—Apply Lime Sulfur Solution (8 gallons to make 100 gallons of spray) or Bordeaux Mixture (16 pounds to make 100 gallons of spray) just after the vines have been trimmed. Spray the trimmed plants and all the ground. This spray serves as a winter "cleanup" and particularly serves to control Leaf Spot.

**Foliage Sprays**—Red Spider, Aphis and Thrip are the principal pests of strawberries. They are easily and surely controlled by using Volck (1½ to 2 gallons to make 100 gallons of spray) with a small amount of nicotine sulfate (½ pint Black Leaf 40 in 100 gallons of Volck Spray).

## Raspberries, Blackberries, Loganberries and Currants

To a greater or less degree the same pests infect all these varieties and similar methods of control are used. Here, as with strawberries, a dormant spray is practiced followed by one or more foliage sprays.

**Dormant Spray**—Any time in winter—preferably after the bushes are pruned—using lime sulfur solution (8 gallons in 100 gallons of spray) or Bordeaux mixture (16 pounds in 100 gallons of water). This spray serves as a general cleanup and particularly controls Leaf Spot, Orange Rust and Cane Blight. On Himalays this dormant spray should be delayed until the buds start to burst in the spring; and the lime sulfur dosage used at half strength (4 gallons to make 100 gallons of spray).

Sometimes Rose Scale may be present on the bushes, and in this case a slightly different dormant spray should be used—namely,

**Volck, 2 gallons;  
Bordeaux Mixture, 8 pounds, } to make 100 gallons of spray.**

As a general cleanup spray in the winter time, this last formula is to be commended over the other spray first mentioned, of lime sulfur or of Bordeaux alone.

**Foliage Sprays**—The summer spray for Red Berry of Himalayas and spraying for Red Spider can now be combined by using Volck (1½ gallons to make 100 gallons of spray). This spray should be applied when the spider first appears.

On Himalayas for Red Berry disease as the bushes are blossoming.

*The scientific research work of the California Spray Chemical Company has revolutionized spraying practice, reduced costs and given safer and better control.*

# STRAWBERRIES

**S**TRAWBERRIES are a great specialty with us as we are not only interested in commercial production but have grown and supplied planting stock to many of the largest, most successful growers during the past eighteen years and have been closely associated with the development of the berry growing industry in Central California.

This section has the longest known fruiting season, extending over a period of eight months, therefore the variety must be carefully chosen and the plants must have the vigor and vitality to maintain their growth and keep up the yield and size throughout this long season.

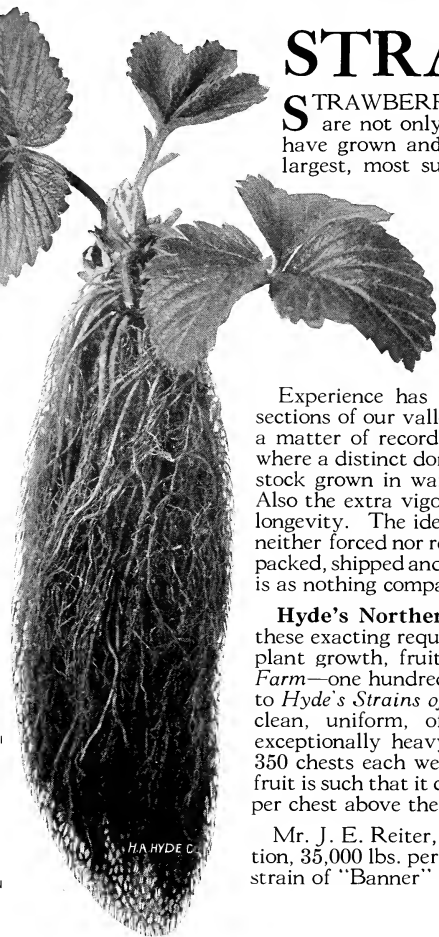
Experience has proven that plants grown in the milder sections of our valleys have not fruited profitably. It is also a matter of record that plants from Northern cold sections where a distinct dormant period prevails have out-yielded the stock grown in warmer sections, in many cases two to one. Also the extra vigor of the plant is noted tending to greater longevity. The ideal plant grown under the right conditions is neither forced nor retarded, never allowed to set fruit, and dug, packed, shipped and handled right. The first cost of such stock is as nothing compared to the results that may be obtained.

**Hyde's Northern Grown Plants** have successfully met these exacting requirements as has been demonstrated by the plant growth, fruiting and sales records of *Oak Grove Berry Farm*—one hundred and forty acres, all of which was planted to *Hyde's Strains of Northern Grown Plants*. The growth was clean, uniform, of great vigor and the production was exceptionally heavy, many individual acres producing over 350 chests each weighing 72 lbs. net, and the quality of the fruit is such that it consistently commands from \$1.00 to \$5.00 per chest above the market.

Mr. J. E. Reiter, of Mayfield, holds the record for production, 35,000 lbs. per acre, 1919 crop, grown from Hyde's select strain of "Banner" plants.

*Hyde's  
Select  
Plants  
are grown  
from  
one-year  
mother  
plants  
that are  
not allowed  
to fruit.  
They have  
vigor,  
vitality,  
longevity*

*Berry  
Baskets  
and  
Crates*



## PLANTING STOCK

*It is of the utmost importance that the stock for large commercial plantings be of a uniform type and the true variety known to be commercially profitable in your section.*

*An uneven development, a variation in the size and coloration of the fruit, difference in the bearing period and longevity, all prove costly to the grower.*

*We offer you the advantage of securing your planting stock from large acreages of selected strains that have proven their uniformity and commercial value.*

*Avoid purchasing from sources that assemble your order from many different growers.*



*Oak Grove Berry Farm—140 Acres Famous from the Pacific to the Atlantic for the uniformity and superior  
Demonstration Farm proved the superiority*

# HYDE'S BANNER STRAWBERRIES

Our's is the original strain and holds the world's record for production.  
35,000 Pounds per Acre 1919 Crop



**THE Genuine Banner Strawberry** excels in every desirable quality all other known varieties, and from the date of its introduction in 1899 received instant recognition from commercial growers wherever distributed, maintaining its position as the most profitable and satisfactory market variety to date.

The great beauty, delicious flavor and sweetness, rich dark glossy red color, uniform size, firmness and keeping qualities have made "Banner" in big demand in every market at top prices.

The growth is vigorous and upright, the strong erect plant bearing very early and abundantly, and is practically immune to disease and pests.

Under proper conditions three crops a season can be grown, 30,000 lbs. per acre, and "Banner" bears 2 years longer than other sorts.

*The planting stock was carefully controlled for many years and the demand was so insistent that many substitutes have been sold for "Banner." The true stock is still scarce and planters should protect themselves by purchasing from reliable authorized distributors only.*

**Hyde's Nick Ohmer**—An ideal market variety, early heavy cropper, the bright red berries color evenly and hold their finish and size through a long season, and appear immune to disease.

Nick Ohmer is one of the few Eastern introductions that have made good under California conditions. Its early bearing, heavy yield and the splendid keeping qualities make it profitable commercially. *To be sure of the true variety, buy direct from us.*

**New Oregon**—One of the most profitable varieties for California growers. Large, deep, glossy red, of the finest flavor. Bears early and heavy, keeps and ships well.

**Marshall**—A firm, red berry, good keeper and one of the standard commercial varieties. Can be planted on adobe soil with good results.

**Magoon**—For home gardens. Fine, large, sweet berries, deep red clear through. Bears heavily and continuously through a long season.

**Progressive**—Everbearing. The best of this class. Large, rich red berries of the finest quality. Good for home gardens.



rior excellence of its Strawberries. Marketed in Car Lots as Far East as Chicago and New York. This of our Northern grown plants and varietal strains.

## STRAWBERRY PESTS and DISEASES

**A**T THE BEGINNING of the dormant period, from late December to February, all foliage should be carefully pruned off and burned at once—it is important that there should be no injury to the crowns—this can best be done with a hand sickle.

From this time as growth starts, the utmost vigilance is necessary to identify and check promptly any disease or insect attack. We suggest that the grower provide a magnifying glass to quickly detect red spider—other troubles such as yellows, green aphid, thrip, leaf spot, etc., are readily recognized but red spider should be detected and controlled before it becomes serious.

**Red Spider**—This, our worst pest, is always with us but by prompt attention in the early stages can be easily controlled by spraying. In advanced stages a bad infestation yellows the foliage and checks the growth and development of the plants. An examination of the underside of the foliage with a magnifying glass shows colonies of the small red adult "spiders" and nests of young protected by a slight webbing. It is important to determine the presence and use the control measures before the damage is done. Red Spider is prevalent at all seasons and in most sections but does greatest harm in dry weather, and is now known to carry the disease known as "strawberry yellows."

**Aphis**—These are seasonable and do most damage in damp cloudy weather, but are easily controlled by spraying. Aphis are also carriers of the "yellows." For spray instruction see page —.

**Strawberry Thrip**—Very minute, yellow, with orange thorax. Eggs round, red, and inserted into the tissue of the host, hatching in a few days they begin feeding at once on the blossoms, destroying the pistils. They also injure the unripe berries, causing the tips to remain green and hard. Thrips breed rapidly in warm weather and by shaking an infested plant they will appear in great numbers.

Hay fields or grass stubble are breeding places and should be cut and burned off if near strawberry plantings. Spraying is effective and Volck 1½ gallons, half pint Black Leaf 40, 100 gallons water, thoroughly applied to the foliage gives sure results.

**Strawberry Root Weevil**—This pest is not established in California, only one case having been known, and prompt measures of control prevented further spread.

Introduced from Europe it has spread gradually through Canada and the United States to the Pacific Coast. We have illustrated and described it here to help California growers identify it as there is much confusion and misunderstanding, many grubs and beetles being mistaken for this pest.

The adult is a snout beetle about a quarter inch long, reddish brown when first emerged, soon turning black. One distinctive feature is that it has no wings but is distributed by its migrating instincts which starts it crawling both spring and fall. Being unable to fly restricts its rapid distribution except as it is carried by some outside agency. The beetles live over one year and there are two generations present at the same time. They hibernate in the soil around the plant and in the plant itself, or may crawl away into any sort of hiding place. The grubs pass the winter in the soil feeding on the roots of the host. The larvae is about ½ inch in diameter and ¾ inch in length, pinkish white or white, with brown head.

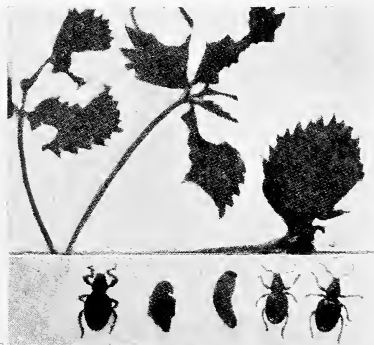
The beetles feed on the foliage and the larvae destroy the fine feeding roots, even girdling the crown and sometimes work in the tap root, plants badly infested have the roots eaten off.

Control measures have varied and are largely experimental but we are advised that there are now experimental trials with poison baits fed to the beetles that give promise of effective control. There is a long list of host plants for both beetle and grub.

**Strawberry Root Borer** (*Sesia rutilans*)—The elongate white larvae has brown head and darker jaws, feeds on the interior of the crown and tap root, eating out the heart so that if the plant is pulled from the top it often breaks off showing the eaten out center and the larvae. The adults are clear winged moths. Infested plants should be dug up and destroyed in the fall.



Strawberry Root Borer



The adult beetles of the Strawberry Root Weevil feed on the foliage (see above). The larvae feed on and destroy the roots. Center cut—Strawberry plant with roots eaten off. Beetles and larvae shown here life size.

Copy from Crop Pest Report, Oregon Agricultural College, 1911-12.



## STRAWBERRY YELLOWS

This is the disease that has caused so much loss to California growers for many years past and which has now been identified as one of the virus or mosaic diseases and described by Prof. Plakidas of the University of California as follows:

"Characteristic curling or cupping of the leaves, yellowing of the leaves around the margins and between the larger veins, dwarfing of the leaves and stunting of growth of entire plant. Disease transmitted through the runners, every new plant from a diseased mother plant shows the disease. The root system appears healthy during the early stages, some symptoms do not always show if growing conditions are favorable, an affected plant has never been known to recover though at times they appear to, but always relapse.

"The disease is spread by insects, red spider and aphid are both known to be carriers. Up to the present time no satisfactory control measures have been found and the best recommendation is to destroy affected plants, being sure to secure only planting stocks that are free from this disease and never plant near old strawberry fields or affected plants."

**Leaf Spot**—Leaf spot is caused by a fungus and first appears on the foliage as a small purple or dark red spot that soon enlarges showing a grayish center with a purple margin—in severe cases these run together and injure the plants seriously but as a rule cause little loss. Cleaning up the beds and burning all old foliage after each fruiting period will usually control this but if severe use Bordeaux, spraying in early spring when fruit is about half size and late in fall after fruiting period.

**White Grubs**—These are the larvae of "May beetles" or "June bugs" usually found in grass lands. If necessary to use old sod or grass land, plow it in the early fall. This will turn up the young and result in killing many as they are soft at that time and will perish from exposure. When actually present in strawberry fields they must be dug out as fast the plants show injury.

**Crown Miner**—The larvae are slender, of a distinct reddish color with a brown head. When mature are less than a half inch long. They feed within the crown mining just within the bark, and tunneling up and down and across; also sometimes feed on the whorl of the growing leaves at the tip of the crown. The adult is a small slow flying moth. The eggs are white, transparent at the tip of the smaller end and are deposited on the under sides of the leaves on the sheaths about the crown. Plowing up the field when badly infested is advised.

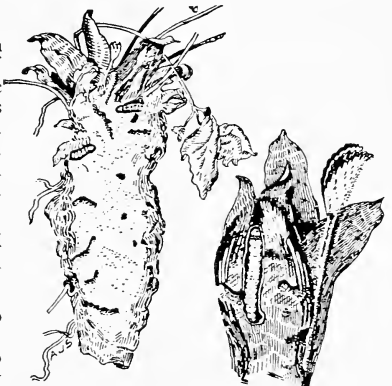
**Wire Worms**—These are often present in grass lands and continued rotation of cultivated crops is recommended. Poison bran mash under boards or stones also helps to eradicate them.

**White Fly**—Very small, four-winged, occur from May to September, laying eggs on the under side of the leaves, hatching in about ten days, the larvae attach themselves to the leaves sucking the plant juices and excreting a honey dew that drops on the lower leaves, forming a sticky varnished surface upon which a sooty fungus may develop. The damage from white fly is seldom severe except in very dry seasons. Spray during the larval stage with Volek or any good contact spray of moderate strength, being sure to reach the under side of the foliage.

**Cut Worms**—These sometimes cause great loss and poisoned bran should be placed under boards in the infested area. To make this bran mash take 50 lbs. bran, add ½ lb. sugar to a gallon of water, using enough water to moisten the bran, add ½ lb. white arsenic, sprinkling it over the bran and working it thoroughly. A tablespoonful near the base of the plants under a board or block will attract and destroy the cutworms.



*Showing stunted growth and yellowing and cupping of the foliage*  
(Photo by courtesy University California)



*Crown Miner (aristotellia sp.)*  
*Strawberry crown showing burrows of crown miner, also mature larva in cocoon in crown.*

(Original drawing  
Oregon Agricultural College)

# CANE OR BUSH BERRIES

## PLANTING STOCK

In comparison with strawberries the propagation of bush berry plants of trailing or running nature is much simpler, and there does not seem to be the great variation of stock grown in different sections.

The main thing is to see that the parent plant is vigorous, healthy and free from disease. To obtain the strongest, best sets these plants should be grown in rich well drained black loam or sandy soil. The end of the runners to produce the plants should be set in the ground early. Many growers allow the tips to root themselves but the best method is to set each tip by hand which will insure a quick start, allowing a maximum root system to form before the tip plant is taken up in the spring.

Some growers have found it advantageous to cut off the tip with a sharp knife just beyond a joint. This forms a round callous and gives a large perfectly formed root system.

The roots on these tip plants should be allowed to ripen, in other words should become partially brown and past the white immature stage.

It is highly essential that the plants should be taken out from moist ground and set in the commercial field without being allowed to dry out in the least. If they can be packed in a box with damp moss on the bottom and through the box and planted within 24 or 36 hours, transporting them to the field in trucks or by some other quick method, the stand will be much better. It is always best to put water in every hole as the plant is set, regardless of weather conditions. This keeps the roots moist and avoids any danger of drying out, also helping to settle the soil around the roots.

In the case of varieties which are propagated by suckers or portions of roots, it is well to transfer these rather late in the spring months. They also should be selected carefully regarding diseases, and the mother plant should be well looked over, patches being avoided that are infested with the Cane Borer, as this is a great menace to new fields, and is easily transported in the young stock. Young plants for propagation should have a large strong section of root, with a top preferably of last season's wood, well ripened and in its dormant state.

Gooseberries and currants are usually propagated from cuttings. These are taken in the early spring from the hardened wood and set in nursery rows close together. Here they are given proper care and produce a fine fibrous root system, and are ready for digging and distributing by the following winter. Care should also be taken with this stock that the parent plants are clean, healthy, prolific and free from diseases.

## VARIETIES

**Cory Thornless**—The Cory Thornless Blackberry is a new introduction that is proving very satisfactory and very popular. The big luscious berries often grow to a length of  $2\frac{1}{2}$  inches, have a small core, are almost seedless and the distinctive flavor is suggestive of the wild berry. They are richer and sweeter than other blackberries yet have sufficient acidity to make the finest of jelly.

The vigorous clean canes grow erect to a height of about five feet then assume a trailing habit, making a growth of 25 feet or more, and properly cared for gives enormous yields through a long season, thrives in any good soil and will amply repay for special culture and fertilization.

For commercial growers "Cory Thornless" will be a big money maker having proven superior in every way to other blackberries in our growing tests covering several seasons, stands handling and shipping and costs less to pick and prune.

**Himalaya**—The Himalaya is a heavy rank grower and one too well known to need description. It is the heaviest yielder of any of the bush berries, and has been known to produce over 300 chests per acre.

**Cuthbert**—For Raspberries, the Cuthbert is the standard commercial berry and the one usually used. The California Surprise under our conditions bears nearly every month in the year.

**Ranaree**—The Ranaree is a new variety which has a record production of ten thousand pounds to an acre and bears continuously from May tenth until frosts.

The life of a planting depends on soil conditions and care, but normally loganberries, blackberries, raspberries should be profitable for from seven to eight years, the Himalaya from ten to twenty years.

**Loganberry**—Originated in Santa Cruz and is one of the most valuable commercial or home garden berries for fresh or dried fruit processing or fruit juice.

**Phenomenal Berry**—Similar to Logan, brighter red, larger, sweeter, with distinctive raspberry flavor.

**Currants**—The well known Cherry Currant is one of the best for California. Perfection is also good.

**Gooseberry**—Oregon Champion is recommended.

For complete list and descriptions of Bush Berries see pages 14 and 15.



# GROWING BUSH BERRIES

Success or failure is influenced by local conditions including soils, water supply, air, drainage, freedom from frost, available labor, insects and diseases, correct cultural methods, markets and management. Some of these are beyond the control of the individual but as a whole can be handled in a manner to insure success.

Poor soil, poor culture, lack of moisture, anything that checks the growth, results in a shorter crop and small fruit not only this year but the following year as well. Moisture is of utmost importance as bush fruits root near the surface (but drainage must be good). On account of this shallow rooting, deep cultivation must be avoided as it tears the roots and makes too many sucker plants, these must always be kept down.

No reasonable man would attempt to lay down hard and fast rules for the raising of berries. There is such a variation in soil conditions, method of irrigation, that each planter must adapt his methods to the conditions at hand. The following are standards of practice for planting and growing small fruits in this district.

These berries are usually grown in rows about nine or ten feet apart, with a flume or pipe along one end so that they may be irrigated by a ditch along the row. Most varieties are trained up on wires. The general California practice is to use 2 x 2 inch stakes, 4 feet 6 inches long every fifteen feet along the row with two strands of No. 15 wire. In the North, a third wire is used, placed above the first two. As the new shoots grow, they are fastened to the upper wire. After the vines are through bearing, the old wood is cut out and removed and the new growth, which furnishes the bearing wood for the next season, is tied to the two lower wires, leaving the upper wire free for the new spring growth. With Himalayas and some rank growing varieties it is often the practice to place a cross bar on the stake and use two wires one at either end of this cross bar. When this method is to be used, the rows must be planted further apart.

**Irrigation** is required three to six times during the first season. The following years irrigation is given every two weeks up to picking season and then every week after each picking.

The customary planting distances are as follows:

Cory Thornless Blackberry.....	6 x 9 ft.	806 plants to acre
Improved Lawton.....	4 x 6 "	1200 " " "
Himalaya.....	8 x 10 "	544 " " "
Loganberry and Phenomenals.....	6 x 8 "	777 " " "
Raspberry.....	3 x 6 "	2420 " " "

Costs on these berries run about as follows:

Rental of land.....	\$20.00 to \$50.00 per acre
Preparation of land, up to grading.....	7.00 to 10.00 " "
Grading.....	10.00 " "
Planting.....	15.00 to 20.00 " "
Fertilizing, about 500 lbs. fish meal or 300 lbs. of nitrate.....	50.00
Plants, depending on varieties.....	50.00 to 200.00 " "

The **costs** on plants, labor and water vary so widely that no general rules can be set. With Japanese labor one family is able to handle five to ten acres up to the picking season. During the picking season they require about fifteen pickers for this acreage.

**Production**—Logans will yield forty to a hundred chests of seventy pounds each. Himalayas one to two hundred chests per acre.

**Pruning** of berries that fruit on the new wood each season should have the old canes cut out in the dormant period. Some of the continuous bearers like Himalaya and Evergreens should have the tips of the strong shoots cut back in the growing season to produce laterals that increase the yield.

Raspberries should have the canes removed after fruiting—the plant thinned to the desired number of new canes and cut back to a height of 3 or 4 feet. Keep all suckers cut.

**Fertilizing** by working in manure and cover crops is advised to build up the humus content of the soil and thus retain the moisture.

## SARDINE FISH MEAL

For quick results our Sardine Fish Meal is best. It is a complete fertilizer, is quickly available and is rich in organic nitrogen, phosphoric acid and has 3½% of water soluble potash. Potash is necessary to firm and put sugar in the fruit. Ask for prices and information.

# VOLCK THE SCIENTIFIC SPRAY FOR BUSH BERRIES. See Page 7.

# BUSH BERRIES



*Logan Transplants*

## LOGANBERRY

**THE** LOGANBERRY was originated by Judge Logan of Santa Cruz, right in our own county, and we take great pride in the quality of our stock.

Loganberries are larger and longer than Blackberries, are dark red in color, are rich, juicy and of a characteristic flavor between a Raspberry and Blackberry. The fruit is borne in great clusters and is famous for its juice and jams. The growth is very rapid and vigorous, if handled right will bear for many years. Their short life in some sections is due to disease and is easily controlled. We can tell you how.

*Growers write for special prices for tips or transplants for large plantings*

**Logan Transplants**—It has been the general practice to plant the tips, but as they are very tender and easily damaged in handling and killed by a little exposure to air or sun, we have provided a splendid stock of transplants. They are large, well rooted, dormant, and can be handled with less risk of injury or loss, and will make a wonderful growth.

## The "PHENOMENAL" Berry

"Phenomenal" is a great improvement over the Logan, being larger, brighter red, sweeter and richer, has a distinctive raspberry flavor. The berries are broader at the top, tapering more to the point than the Logan. "Phenomenals" grown under the same conditions as Logans outyield and bring a better price.

## CORY THORNLESS BLACKBERRY (See Cut Below.)

### Outyields and Outclasses All Other Blackberries

*Discovered by Martin Muehli in Tuolumne County, 1909, a single cane on a Mammoth Blackberry. After several attempts, W. C. Cory, who later rented the place, succeeded in propagating this wonderful berry that bears his name.*

**Cory Thornless**—Often measuring 2½ inches in length. Has a small core and is almost seedless. The flavor is like the wild berry, but they are richer and sweeter than other blackberries, yet are acid enough to make the finest of jelly. They are very early and bear enormously through a long season. Firmer than Mammoth and costs less to pick and prune.

Our growing tests of every thornless variety on the market, proved "Cory" the only one of value.

## BLACKBERRIES

**Macatawa**—This new everbearing blackberry is a bush type requiring no support. The fruit is uniformly large, very sweet and firm, with few seeds, and no core. A good shipping and canning variety, fruiting from April until frost.

**Oregon Evergreen**—Vigorous Evergreen, lacinated foliage, fruit large, rich, excellent for market or canning. Bears heavily July to frost.

**Lawton**—The standard commercial variety, large, splendid quality; resistant to rust.

**Mammoth**—Very early and productive. The large, luscious berries are not good shippers.

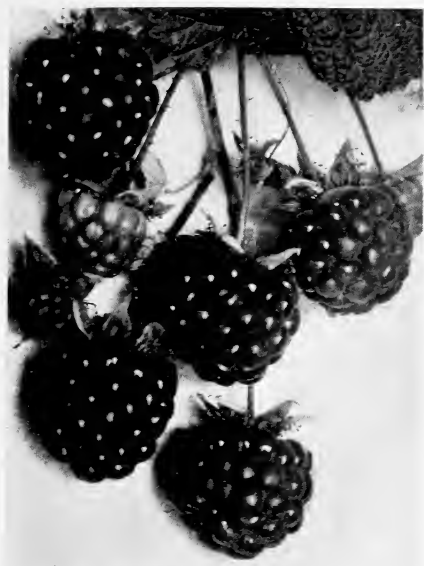
**Himalaya**—One of the most profitable and dependable berries, bears heavily and continuously.



*Logan*

*Phenomenal*

*Cory Thornless Blackberry*



### RASPBERRIES—Red

The varieties we offer have been tested under our personal supervision and are recommended as the best in their class.

**Superlative**—Large, bright red, firm berries, of the finest quality, vigorous and heavy yielding.

**Cuthbert**—Deep, rich red, large berries of excellent quality. The standard for commercial or home use.

**Ranaree**—This splendid new raspberry is 3 weeks earlier than other sorts and bears heavily until frost. The large, fine flavored, red berries are good shippers. We have tested it carefully and can recommend it for this section.

**St. Regis**—The standard everbearing variety. Berries large, of excellent quality; bears early and continuously.

### RASPBERRIES—Black

**Kansas**—Large, ripens early. Vigorous, prolific. A good market variety.

**Gregg**—Standard market sort. Large, prolific; with heavy bloom.

**Plum Farmer**—Almost as early as Kansas and ripens entire crop quickly. One of best early for market.

### DEWBERRIES

Of trailing habit, bearing early and freely, making them profitable for commercial growing. We offer two standard varieties, one fruiting ahead of the other, prolonging the picking season.

**Lucretia**—Fine sweet berry, no hard core. Earlier than Gardena. Rust resistant.

**Gardena**—Large, firm, delicious berries for early market. Trailing.

### CURRENTS

**Perfection**—Fruit bright red. Sub-acid flavor. Bears heavily.

**Cherry**—Deep red; fruit large, fine for preserves, also splendid market sort.

### GOOSEBERRIES

**Oregon Champion**—Fruit pale green. Very large and sweet. Bears heavily.

## VEGETABLE PLANTS

All Transplanted, Well Rooted Stock. Standard Varieties for Home and Market

### ASPARAGUS

We specialize in growing Asparagus Roots in the north for California planters and off true stocks of the **New Washington varieties**, the **Giant Argenteuil** and the **Standard Palmetto**.

We can supply any of the above in almost unlimited numbers and will grow to your order.

**Artichoke**—Purple Burbank and Green Globe. Large orders special prices.

**Cabbage**—Early Drumhead, Late Autumn King, Copenhagen Market.

**Cauliflower**—Early Snowball.

**Chives**.

**Kale**—Cow, or Thousand Headed.

**Lettuce Plants**—Los Angeles.

**Peppers**—Bell or Bullnose, Pimiento, Cayenne Mexican Chili.

**Tomatoes**—New Stone, Ponderosa (Beef Steak), San Jose Canner.

**Earliana Tomato**—Ripens early, bears freely, unexcelled for home or market. We have fine sturdy plants for seasonable delivery.

### RHUBARB ROOTS

A rich, sandy soil, wet but well drained, is best for Rhubarb. While it is frequently propagated from seed, only a percentage comes true. The popular method, however, is to use young plants propagated from the crown. Set plants 3 feet by 6. The best stems are produced the second year, but it continues to produce for several years. When the blossom stalk appears, it should be cut back well into the ground. Set the crowns of the plants so that they are 2 inches under the surface of the soil. This is important. Choose a place where the soil will be moist at all times.

**Crimson Winter**—Best of the Winter rhubarbs.

**Riverside Giant**—A wonderful new hardy rhubarb of the finest quality, also outyields all other varieties either in the open ground or for forcing.

**Panama**—An everbearing rhubarb of enormous size. Excellent flavor.

**HORSE RADISH**—Roots for planting.

## DISEASES OF BUSH BERRIES

We refer briefly to a few of the most troublesome that occur in Central California and will be pleased to give additional information on request.

**Crown Gall**—or **Root Knot**—is a bacterial disease causing serious loss and is best controlled by burning old plants that are affected and setting only clean, disease-free stock in new plantings on clean ground. The Oak Fungus (*Armillaria Mellea*) also attacks plants in some districts.

**"Septoria Leaf Spot"**—Logans, Phenomenals, Blackberries, are all susceptible to the attack of this fungus (often mistaken for Anthracnose which it resembles). The spots on the leaves and canes have light colored centers with dark red or purplish margins. In seasons when the logans are badly affected some damage is caused by the injury and loss of the foliage. The fungus in the spots on the leaves and canes throw off spores during the damp spring weather, early cultivation removing the fallen leaves and early spraying with Bordeaux 3-3-50 just before the season when attacks might occur will give control. It is also advisable to give a heavy spraying of Bordeaux at the beginning of the dormant season.

**Orange Rust**—Black and purple varieties of Raspberries are more susceptible to "Orange Rust" than the red varieties. Infected plants make a spindling growth and in a few weeks the underside of the leaves will be covered with orange colored blisters or pustules which shed masses of reddish orange spores. The canes may appear to recover as the new growth will look healthy but will not fruit the following year.

All affected plants should be destroyed and only disease-free plants used. A microscopic examination is necessary to determine affected plants.

**Control**—Spraying with lime sulphur one to ten or Bordeaux 4-4-50 (with calcium caseinate, 1 pound to 100 gallons or a gelatin sticker) applied as a delayed dormant spray just as the leaves begin to show green.

In serious attacks a second application of Bordeaux may be given not later than a week before the blossoms appear, only young canes should be sprayed, being careful to avoid spraying the foliage of old canes. Lime sulphur 1-40 may be used in place of Bordeaux. (Farmers' Bulletin 1488, U.S.D.A.)

**Anthracnose** of Raspberries is a serious trouble in some sections of the east but not generally distributed on the Coast.

All old canes and stubs should be kept cut out and burned and the fruiting canes removed and destroyed after harvest, also any young canes that are affected. Give clean culture and remove all rubbish.

### REDBERRY DISEASE OF THE HIMALAYA BLACKBERRY

**"Redberry disease"** refers to the color of the berries—they remain bright red, sometimes portions only turn black, but in serious infestations never ripen or color up. They are stunted in size and either dry up on the vine or decay after the ripening period.

This condition is caused by a very small white mite that enters the blossom and infests the drupelets when forming—also works around the base of the berry and in the core, checking the growth, causing uneven ripening and red berries that never ripen. Many plantings have been ruined by this mite which cannot be seen without the aid of a magnifying glass. This pest is distributed wherever Himalaya berries are grown, but up to date has not attacked any other blackberry, even when the vines interlace affected Himalayas.

**Control** recommended and successfully used by Santa Cruz County Agent—"Spraying with 4% to 8% lime sulphur in February as growth is starting. This spray has not only proven of value in controlling the Redberry Blister Mite but has some value in preventing sulphur burning in the summer spray.

"5 lbs. of Wettable sulphur to 100 gallons of water, when in full bloom in June.

"This spray may be repeated later in the season to protect the late berries in cases of severe infestation."

### RASPBERRY HORN-TAIL

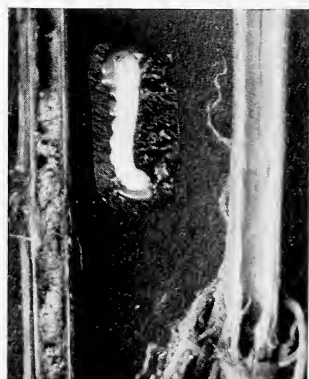
(*Hartegia cressoni*)

Quoting from M. B. Essig, Calif. Hort. Commissioner:

"The adults are slender wasp-like insects about half an inch long, very active. The females are yellow with dark markings. The males black with very little yellow. Eggs pearly white, oblong, with a curved point at one end. The larvae are white with black head, are 1 inch long having a noticeable point at the tail and are rather 'S' shaped. They work up into the tender tips killing them and then turn and work down through the center pith of the canes. They also attack roses, blackberries and loganberries. The eggs should be destroyed as they are readily found on the tender tips of the young shoots in the spring, also infested canes should be cut out.

**Currants and Gooseberries** may be troubled with mildew, which can be controlled by dusting with sulphur or spraying with Bordeaux in the early season.

The Currant Borer also works in the heart of the branches and should be pruned out.

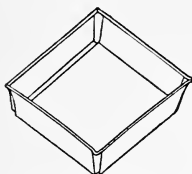


Raspberry Horn-tail

# Berry Baskets and Crates

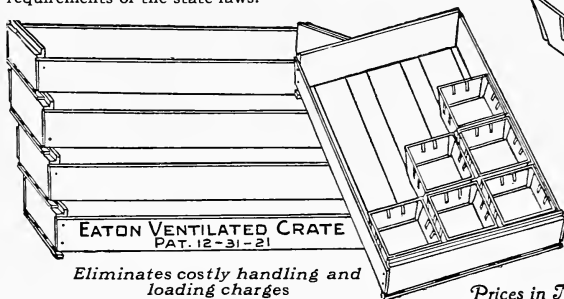
WE ARE HEADQUARTERS for Berry Baskets and Crates in central California, carry complete stocks for delivery in season, and will be pleased to quote you on your requirements.

**TIN TOP BERRY BASKETS**—The neatest, strongest, most attractive berry basket ever devised. Specially made for California growers. They will not check or warp in the sun—nest close—and used with the Eaton Ventilated Crates makes the best package for central California, meeting all requirements of the state laws.

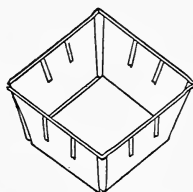


8-ounce Basket for  
Bush Berries

Both 8-oz. and 12-oz.  
"Tin Tops" in  
Eaton Crates  
fit the  
Standard Chest



*Eliminates costly handling and  
loading charges*



Dry Pint Basket for  
Strawberries  
8-ounce for  
Bush Berries

**CHERRIES in  
EATON  
CRATES  
Brought Top**

*Prices in New York Market*

These baskets in the Eaton Trays make possible safe shipment to markets as far distant as Chicago and New York. The rabbeted ends of the Eaton Trays make it easy to cleat 6 or 8 firmly together. A cover is then placed on the top tray, making the most serviceable, economical and attractive package.

The commission houses return the empty trays and new ones can be purchased at all points in berry growing districts. The Baskets are used extensively in Chests with the regular slides, the only change necessary being a slight increase in the size of the chest and slide. Is also used in the "Los Angeles Shipping Crate," holding 15 baskets.

**SALES AGENTS FOR THE SEVEN COUNTIES OF CENTRAL CALIFORNIA**  
Fruit packages of all kinds, standard and special sizes **CALL or WRITE FOR PRICES**

## TOMATO PLANTS

*We grow to order hundreds of thousands of Tomato Plants annually for the large canning and preserving companies and are prepared to furnish extra heavy well hardened field plants of any variety—and will grow to your order at special contract price. See Vegetable Plants, Page 15.*

## HYDE'S NORTHERN GROWN SEED POTATOES

*When you buy Seed Potatoes, be guided by the history of the stock and the condition of the plants during the growing season. Do not depend alone upon the physical appearance of the tubers*


### 1924 WORLD'S RECORD—57752 LBS. PER ACRE

**T**O MR. FRED RINDGE, owner of Rindge Island in the Stockton Delta, belongs the credit for a new world's record for potato production—57,752 lbs. per acre. The former record, 53,760 lbs., was held by Great Britain. It should be noted that the record yields on Rindge Island were produced in open field culture—1400 acres receiving the same treatment. Mr. Rindge has shown what can be done by thorough cultural methods, proper fertilization and the use of good seed.


**Again in 1925**—Quoting from the *Produce News*, Oct. 3, 1925—"California again broke the world's record this season from 4 acres of Low Top Burbank on Rindge Island, an average of 562½ sacks per acre was made; one acre ran 577½ sacks, beating not only California's best yield but also the world's record. The seed was grown by the H. A. Hyde Co. of Watsonville."

*Growers interested in improving their stock or securing clean seed of strong vitality and having heavy yielding qualities may contract to have their seed grown in the North.*

**Complete Information in Our Annual Catalog**



CORY  
THORNLESS  
BLACKBERRY  
  
OUT-YIELDS  
AND  
OUTCLASSES  
ALL OTHER  
BLACK-  
BERRIES



*Hyde's*  
LOGAN  
TRANS-  
PLANTS  
FRUIT  
EARLIER  
AND  
HEAVIER

*H. St. Hyde & Co.*  
GROWERS-NURSEYMEN

WATSONVILLE, CALIFORNIA

*Hyde's "TRUE BANNERS"*  
HOLD WORLDS RECORD YIELD

